

AMENDMENTS TO THE CLAIMS

Please replace the claims, including all prior versions, with the listing of claims below.

Listing of Claims:

1. (currently amended) A method for electrodynamically braking a rail vehicle which is equipped with a drive-(Θ), ~~wherein~~comprising ~~regulating~~ the acceleration-(a_{act}) of the rail vehicle is regulated as a function of its velocity-(v), characterized in that~~wherein~~ the acceleration-(a_{act}) is regulated to a set point acceleration-(a_{step}) which is proportional to the velocity-(v).
2. (currently amended) The method as claimed in claim 1, ~~characterized in that~~wherein the set point acceleration-(a_{step}) for individual sections is proportional to the velocity-(v).
3. (currently amended) The method as claimed in claim 1, ~~characterized in that~~in order ~~wherein~~ to control the acceleration-(a_{act}) indirectly, the torque-(M_R) of the drive-(Θ) is regulated.
4. (currently amended) The method as claimed in claim 3, characterized in that a PI controller is used to control the torque (M_R).
5. (currently amended) The method as claimed in claim 3, ~~characterized in that~~wherein when the torque (M_R) is controlled it is kept within predefined limits.
6. (currently amended) The method as claimed in claim 3, ~~characterized in that~~wherein an additional torque-(M_V) which is proportional to the set point acceleration-(a_{step}) is added to the torque-(M_R), and ~~in that the~~a proportionality constant is dependent on vehicle values.
7. (Original) The method as claimed in claim 6, ~~characterized in that~~wherein the vehicle values are ~~the~~a vehicle mass, ~~the~~a transmission ratio and/or ~~the~~diameter of the wheels.

8. (currently amended) The method as claimed in claim 1, ~~characterized in that~~wherein the velocity-(v) of the rail vehicle is determined from rotational speeds-(n) of the drive-(6) and/or of an axle.

9. (currently amended) The method as claimed in claim 1, ~~characterized in that~~wherein the acceleration-(a_{act}) is determined as a first derivative of the velocity-(v).